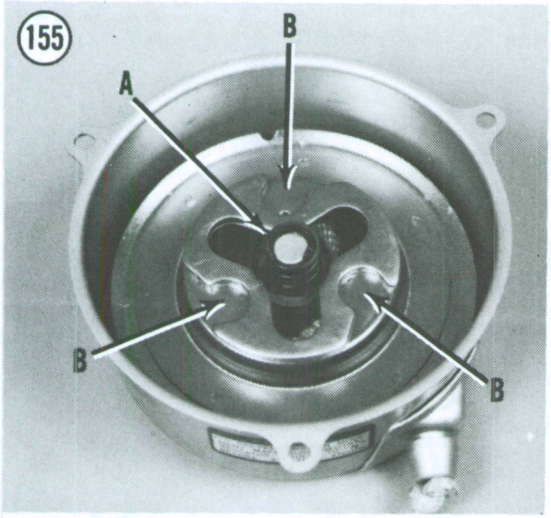
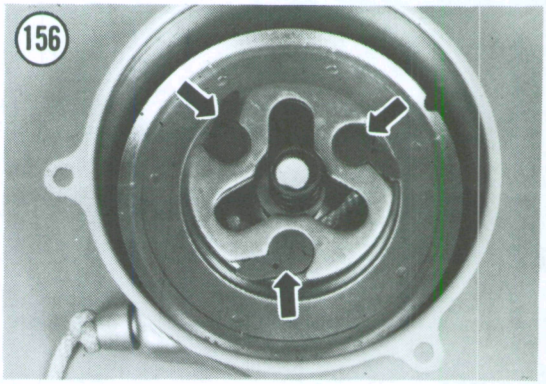
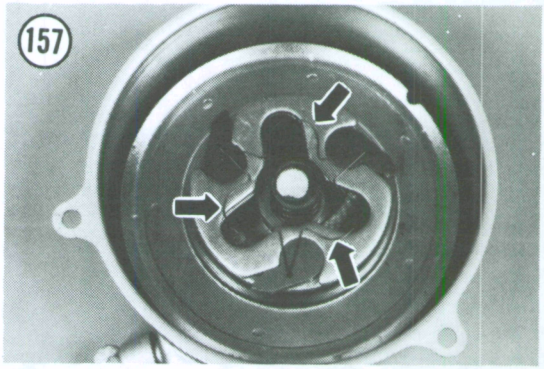
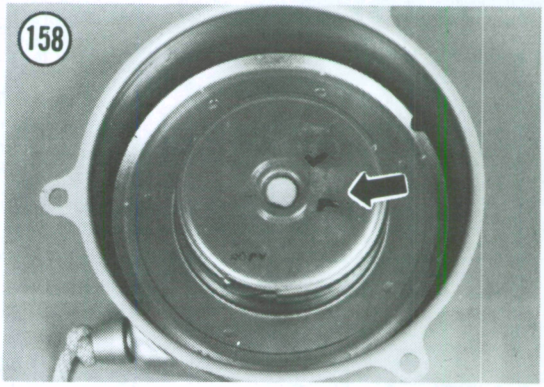
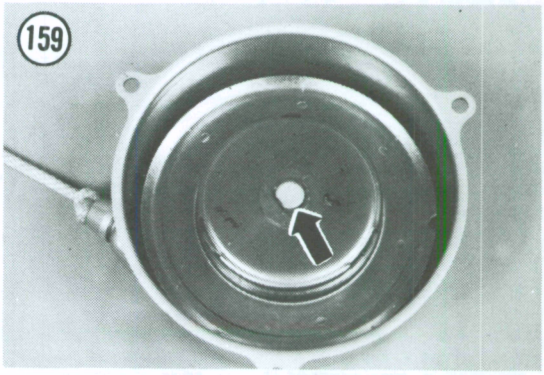










11. Apply a light coat of grease to the areas where the ratchets ride (B, **Figure 155**).
12. Install the ratchets as shown in **Figure 156**.
13A. On ATC70 models, install the washer and the set spring.
13B. On ATC90 and ATC110 models, install the ratchet springs (**Figure 157**).
14. Install the ratchet cover (**Figure 158**).
15. Install thrust washer and circlip (**Figure 159**).

NOTE

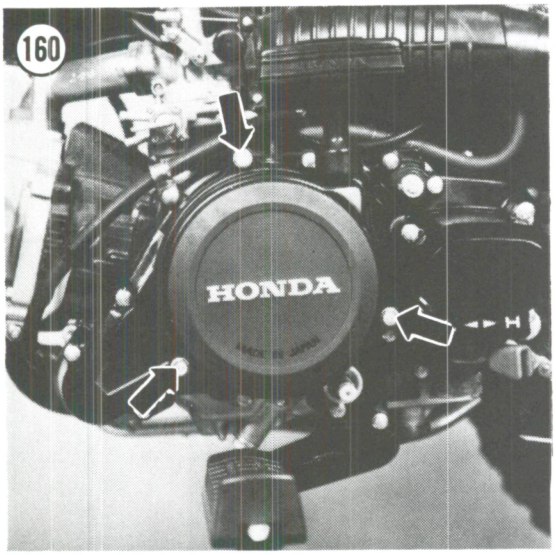
Make sure the circlip is seated correctly in the groove in the shaft.

16. Install the rope through the starter handle and tie the end using the same special knot as shown in **Figure 150**. Apply heat to the knot (a match is sufficient) and *slightly* melt the nylon rope. This will hold the knot securely.
17. After assembly is complete, check the operation of the recoil starter by pulling on the starter handle. Make sure the drive pulley rotates freely and returns completely. Also make sure the ratchets move out and in correctly. If either does not operate correctly, disassemble and correct the problem.
18. Inspect the square holes in the starter pulley. If they are damaged in the area where the ratchets make contact it should be replaced.

RECOIL STARTER (125 CC)

Removal/Installation

1. Place the ATC on level ground and set the parking brake.
2. Shift the transmission into NEUTRAL and remove the gearshift lever.



3. Remove the bolts (**Figure 160**) securing the recoil starter assembly and remove the assembly.
4. Install by reversing these removal steps. Make sure to install a new gasket on the assembly prior to installation.

Disassembly and Starter Rope Removal

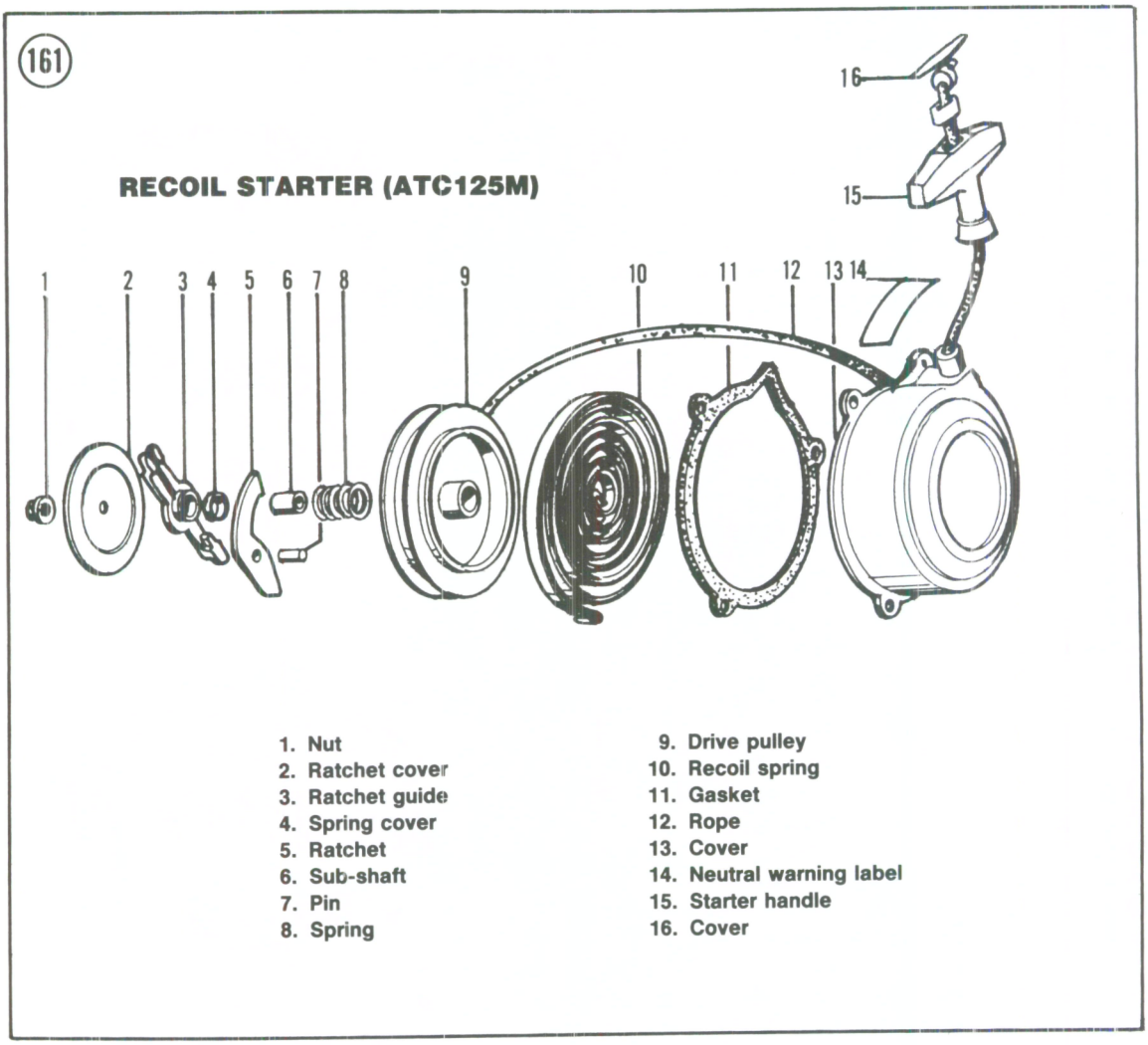
NOTE

Consider replacing the Honda starter rope with an aftermarket vinyl coated flexible wire cable. These cables are available from many dealers and mail order houses.

Refer to **Figure 161** for this procedure.

WARNING

The return spring is under pressure and may jump out during the disassembly procedure. It is a very strong spring and



1. Nut
2. Ratchet cover
3. Ratchet guide
4. Spring cover
5. Ratchet
6. Sub-shaft
7. Pin
8. Spring
9. Drive pulley
10. Recoil spring
11. Gasket
12. Rope
13. Cover
14. Neutral warning label
15. Starter handle
16. Cover

may cut fingers or cause eye damage. Wear safety glasses and gloves when disassembling and assembling.

1. Remove the cover from the starter handle and untie the knot in the starter rope.
2. Hold the starter rope with Vise Grips (A, **Figure 162**) and remove the starter handle from the rope.
3. Remove and discard the gasket.
4. Remove the nut (B, **Figure 162**) and ratchet cover (C, **Figure 162**).
5. Remove the ratchet guide (**Figure 163**).
6. Remove the ratchet (A, **Figure 164**) and the friction spring and cup (B, **Figure 164**).
7. Remove the Vise Grips and release the starter rope slowly into the housing.

WARNING

*The recoil spring may jump out at this time—**protect yourself accordingly**.*

8. Remove the drive pulley (C, **Figure 164**).
9. Untie and remove the starter rope from the drive pulley.

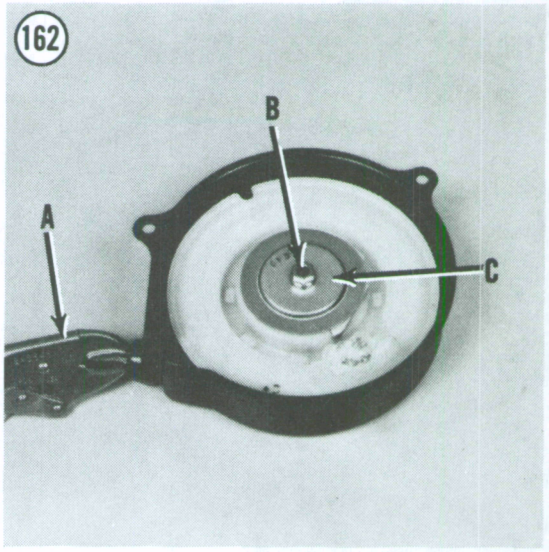
NOTE

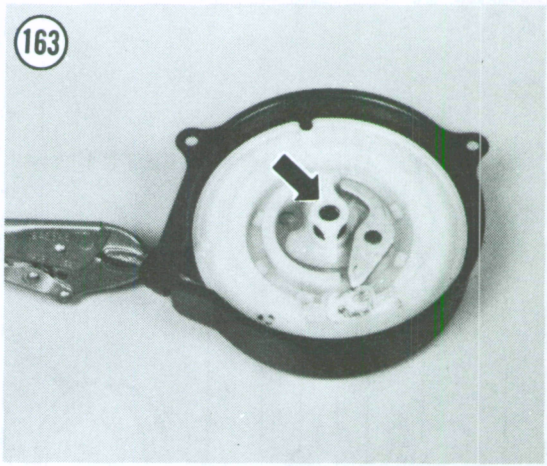
It is a good idea to replace the starter rope every time the recoil starter is disassembled.

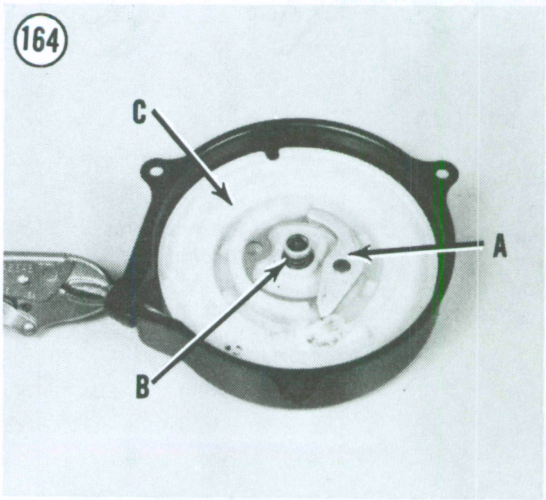
10. Clean all parts in solvent and thoroughly dry.
11. Inspect all moving parts (**Figure 165**) for wear or damage and replace as necessary.

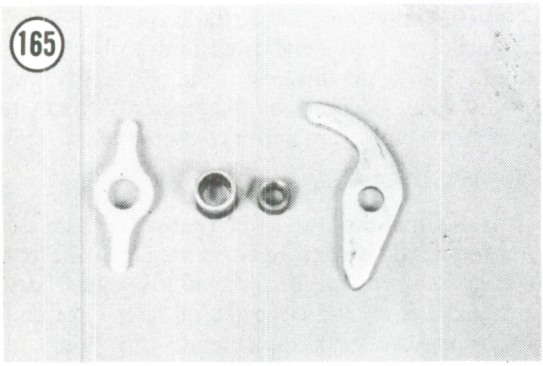
Assembly and Starter Rope Installation

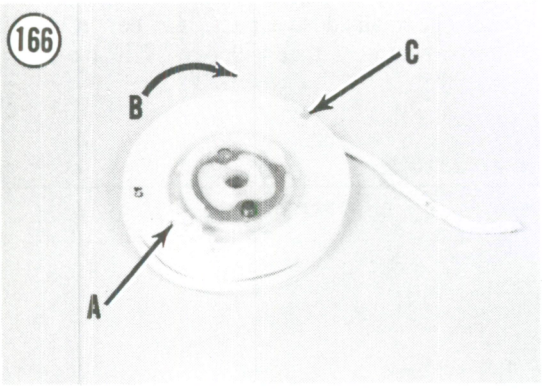
1. Install a new starter rope in the drive pulley (A, **Figure 166**) and tie a special knot at the end (**Figure 150**). Apply heat to the knot (a match is sufficient) and *slightly* melt the nylon rope. This will hold the knot securely.
2. Apply multipurpose grease to the housing shaft (A, **Figure 167**). Install the recoil spring into the housing. Hook the end of the spring onto the hook (B, **Figure 167**) in the housing.
3. Coil the rope onto the ratchet in a *clockwise* direction (B, **Figure 166**).
4. Position the end of the rope in the drive pulley so the starter grip end is located within the notch (C, **Figure 166**) in the drive pulley.
5. Install the drive pulley into the housing while rotating it in a *clockwise* direction. Make sure the rope is positioned up through the notch in the drive pulley. The tab (A, **Figure 168**) on the bottom of the drive pulley must engage with the hook (B, **Figure 168**) in the end of the recoil spring. If they engage, proceed to Step 8. If the 2 will not

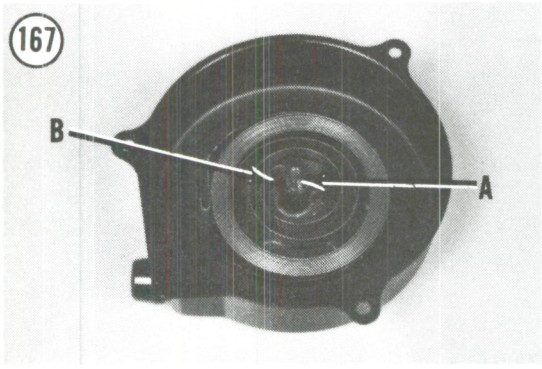


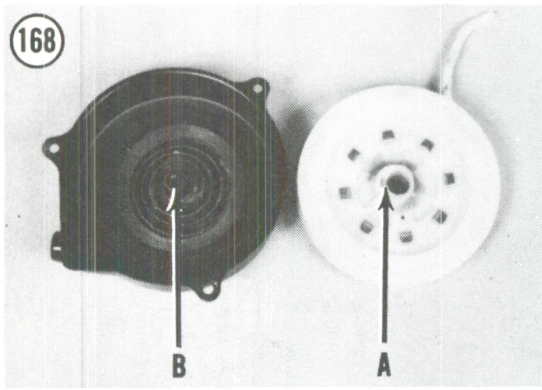












engage, remove the drive pulley and use the procedure in Step 6 and Step 7.

6. Make a *soft* wire hook (do not use stiff wire) and hook it onto the inner end of the recoil spring as shown in **Figure 152**. The other end of the hook must lay flat on top of the spring coils to allow the drive pulley to drop into position. The wire must be long enough so it can be pulled on.
7. Reinstall the drive pulley into the housing while rotating it in a *clockwise* direction. Make sure the rope is positioned up through the notch in the drive pulley. When the drive pulley comes into contact with the recoil spring, pull sideways on the hook to bring the inner end of the recoil spring away from the shaft in the housing. Continue to rotate the drive pulley and push it the rest of the way down until it seats and engages with the spring hook. Pull the soft wire hook out from between the drive pulley and the spring.
8. After engagement with the spring, rotate the drive pulley 2 turns *clockwise* to preload the recoil spring.
9. Hold onto the drive pulley and feed the rope out through the hole in the housing. Secure the rope with Vise Grips (A, **Figure 162**).
10. Apply a light coat of multipurpose grease to the ratchet and install the ratchet (A, **Figure 164**).
11. Install the friction spring and spring cover (B, **Figure 164**).
12. Install the ratchet guide onto the spring cover.
13. Install the ratchet cover and secure with the nut (B, **Figure 162**).
14. Install the rope through the starter handle and tie the end using the same special knot as shown in **Figure 150**. Apply heat to the knot (a match is sufficient) and *slightly* melt the nylon rope. This will hold the knot securely. Install the cover in the starter handle.
15. After assembly is complete, check the operation of the recoil starter by pulling on the starter handle. Make sure the drive pulley rotates freely and returns completely. Also make sure the ratchet moves out and in correctly. If either does not operate correctly, disassemble and correct the problem.
16. Inspect the slots in the starter driven pulley. If they are damaged it should be replaced.

BREAK-IN PROCEDURE

If the rings were replaced, a new piston installed, the cylinder rebored or honed or major lower end work performed, the engine should be broken in just as though it were new. The performance and service life of the engine depends greatly on a careful and sensible break-in.